the award is based on the demonstration of unusual courage in the line of duty or a heroic or humane act during times of extreme stress or in an emergency. In addition, the National Border Patrol Museum in El Paso, Texas, has a permanent memorial display in honor of Inspectors Newton and Azrak.

Designating the United States Border Patrol Station in southern California as the "Theodore L. Newton, Jr., and George F. Azrak Border Patrol Station" is a fitting tribute to honor the bravery and service of these men. Their valor has served as an inspiration for a generation of Border Patrol agents that have followed them in service to their country.

I urge my colleagues to join me in supporting H.R. 2728.

Mr. BOOZMAN. Madam Speaker, I yield back the balance of my time having no further speakers.

Ms. NORTON. I yield back the balance of my time.

The SPEAKER pro tempore. The question is on the motion offered by the gentlewoman from the District of Columbia (Ms. NORTON) that the House suspend the rules and pass the bill, H.R. 2728.

The question was taken; and (twothirds being in the affirmative) the rules were suspended and the bill was passed.

A motion to reconsider was laid on the table.

MINE COMMUNICATIONS TECHNOLOGY INNOVATION ACT

Mr. MATHESON. Madam Speaker, I move to suspend the rules and pass the bill (H.R. 3877) to require the Director of the National Institute of Standards and Technology to establish an initiative to promote the research, development, and demonstration of miner tracking and communications systems and to promote the establishment of standards regarding underground communications to protect miners in the United States, as amended.

The Clerk read the title of the bill. The text of the bill is as follows:

H.R. 3877

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Mine Communications Technology Innovation Act". SEC. 2. FINDINGS.

Congress finds the following:

- (1) The failure of miner tracking and communications devices or lack thereof in mines severely hampers rescue efforts in the event of emergencies.
- (2) Mines, particularly underground mines, have properties that present unique technical challenges for the integration of currently available tracking and communications systems. These properties include the lack of a clear path or open air which is required for radio signals and WiFi. Additionally, because coal is an absorptive material, less than 10 percent of the radio spectrum that is used above ground can be used underground. A fraction of that (only about 1 percent) radio spectrum is actually allocated for commercial communications purposes. As a consequence, the availability of miner communication equipment is severely limited.

- (3) Research and experience have shown that communications and tracking systems may not work equally well in every mine or in every emergency situation, and therefore several different systems may be necessary for development and integration.
- (4) Because of the serious challenges of the mine environment and the limited market provided by the mining industry, much needed technology has not yet been developed by the private sector or is not commercially available in the United States.
- (5) Furthermore, due to the regulatory structure of the industry and the lengthy approval process for mine tracking and communications systems, research must be accelerated so that next generation technology can be quickly and efficiently integrated into mines to protect the safety of miners.
- (6) The National Institute of Standards and Technology is well positioned to help accelerate the development of mining tracking and communications technology. The National Institute of Standards and Technology has a long history of working in conjunction with industry to invest in longer-term, highrisk research which yields national benefits far beyond private payoff. Further, the National Institute of Standards and Technology builds partnerships with industry to leverage existing research and development to drive next generation technology.
- (7) The National Institute of Standards and Technology is well-positioned to accelerate development of consensus mining communications standards given the extensive work that the organization has done in the field of emergency communications to develop standards and technologies for interoperable wireless telecommunications and information systems.
- (8) In developing such standards, the National Institute of Standards and Technology should work in cooperation with the National Institute for Occupational Safety and Health and the Mine Safety and Health Administration, and other relevant public and private stakeholders, to build on existing technology and knowledge regarding mine communications systems.

SEC. 3. MINE COMMUNICATIONS AND TRACKING RESEARCH AND DEVELOPMENT PROGRAM AUTHORIZATION.

- (a) ESTABLISHMENT.—The Director of the National Institute of Standards and Technology shall provide for the establishment of a program of research, development, and demonstration that includes the establishment of best practices, adaptation of existing technology, and efforts to accelerate the development of next generation technology and tracking systems for mine communications.
- (b) COORDINATION.—In carrying out this section, the Director shall coordinate with relevant Federal agencies and industry to evaluate areas of research and development and best practices that will be most promising in protecting miner safety.
- (c) OPTIONAL FOCUS.—In establishing this program, the Director may focus on the following communications and tracking system characteristics:
- (1) Systems that are likely to work in emergency situations.
- (2) Systems that work in coal mines, with special attention paid to deep underground coal mines.
- (3) Systems that provide coverage throughout all areas of the mine.
- (4) Hybrid systems that use both wireless and infrastructure based systems.
- (5) Functionality for 2-way and voice communications.
- (6) Systems that serve emergency and routine communications needs.
- (7) The ability to work with existing legacy systems and to be quickly integrated.

(8) Propagation environment characterization, performance metrics, and independently derived validation tests to verify performance for standards development.

SEC. 4. STANDARDS REGARDING UNDERGROUND COMMUNICATIONS.

Consistent with Office of Management and Budget Circular A-119, the Director of the National Institute of Standards and Technology shall work with industry and relevant Federal agencies to develop consensus industry standards for communications in underground mines. The Director shall also develop and provide any needed measurement services to support implementation of these standards. In their efforts to help develop these standards and related measurement services, the following issues should be addressed:

- (1) The appropriate use of frequency bands and power levels.
- (2) Matters related to interoperability of systems, applications, and devices.
- (3) Technology to prevent interference.

SEC. 5. AUTHORIZATION OF APPROPRIATIONS.

There are authorized to be appropriated to the Director of the National Institute of Standards and Technology such sums as are necessary for carrying out this Act for fiscal years 2009 and 2010, to be derived from amounts authorized under section 3001 of the America COMPETES Act.

The SPEAKER pro tempore. Pursuant to the rule, the gentleman from Utah (Mr. MATHESON) and the gentleman from Georgia (Mr. GINGREY) each will control 20 minutes.

The Chair recognizes the gentleman from Utah.

GENERAL LEAVE

Mr. MATHESON. Madam Speaker, I ask unanimous consent that all Members may have 5 legislative days to revise and extend their remarks and to include extraneous material on H.R. 3877, the bill now under consideration.

The SPEAKER pro tempore. Is there objection to the request of the gentleman from Utah?

There was no objection.

Mr. MATHESON. Madam Speaker, I yield myself as much time as I may consume.

Madam Speaker, I'm very pleased that this action is taking place today on the floor of the House of Representatives. I represent the Second Congressional District of Utah, and that includes the Crandall Canyon Mine where this past August I think everyone in this country is aware of the coal mining accident that occurred where six men were trapped, and during the rescue attempt, three rescuers were killed in a cave-in.

There were a lot of emotions that we all felt and shared during that disaster; but beyond those emotions, I think something that must have crossed all of our minds as we all watched this tragedy unfold was a question, and that was, how is it as the rescuers tried to locate these six trapped men that we can't know exactly where they are, that there isn't some kind of signal or beacon or some way to communicate such that we can have a better sense of exactly where the six men were trapped?

I think that's a question that a lot of us have, and here in Congress, as a member of the House Science Committee, I asked those questions, and the committee collectively, majority and minority, has looked at that issue.

The answer really is that the technology doesn't exist today to communicate in this manner between the surface and folks who are trapped deep underground, and so the effort here and the purpose of this legislation, it's a very narrow piece of legislation, looks at encouraging development of technology that would allow this type of communication to occur in the future.

The thing about this bill that I'm really proud of is the fact that the committee worked so well together, and I really want to thank Chairman Gordon and Ranking Member Hall for their extraordinary effort and also the staff, both majority and the minority, for working together to move this bill in a rather quick manner and in a bipartisan manner. Suggestions were taken from folks on both sides of the aisle, and the bill that came out of the committee reflected those discussions and deliberations among everyone involved in the committee.

So I think this is an example where Congress is passing good legislation, a substantive piece of legislation. It's a piece of legislation that is so important for the 1,400 underground mines we have in this country and, quite frankly, the many thousands of underground mines that exist around the world today, where this type of technology, if it is developed, will allow better communication capability and allow an opportunity for perhaps more success in rescue operations.

Now, I want to be clear on a couple of things. The purpose of the legislation is really to accelerate next-generation technology. The legislation will direct the National Institute of Standards and Technology to establish an initiative to promote research, development, and demonstration of miner tracking and communication systems and to promote the establishment of standards and other measurement services regarding underground mines. I think the legislation will foster much-needed research and development in this field of communications to better protect miners

The time to address this issue is now, before any more accidents leave any additional miner families desperate for word about their loved ones.

Madam Speaker, I reserve the balance of my time.

Mr. GINGREY. Madam Speaker, I yield myself such time as I may consume.

Madam Speaker, I rise also in support of H.R. 3877, the Mine Communications Technology Innovation Act.

First, I want to take this opportunity to thank Chairman Gordon, Ranking Member Hall, and all of the members of the Science Committee and the staff who worked so hard to bring this important bipartisan legislation through our committee and to the House floor today.

Madam Speaker, every Member of the House hopes to avoid another catastrophe such as the Sago Mine explosion in West Virginia in 2006 or the disaster at the Crandall Canyon Mine in Utah this past August. And I certainly want to commend my colleague, the gentleman from Utah (Mr. MATHESON), for introducing H.R. 3877 to address one of the major obstacles to miner safety, and that is, our inability, as he just pointed out, to track miners underground and to communicate with them in the event of such an emergency.

Under the 2006 MINER Act, the Mine Safety and Health Administration, MSHA, and the National Institute for Occupational Health and Safety, NIOSH, receive significant funding to lead an interagency program to develop communication, tracking, oxygen supply and refuge systems for mines. To date, this program has invested over \$23 million, and it is steadily progressing towards installation of new, safer communication systems by the year 2009.

As NIOSH and MSHA continue to advance research and development in this area, there was clear bipartisan agreement within the Science Committee that the National Institute of Standards and Technology, NIST, could enhance these efforts by fostering standards for communication equipment in mines and development of those systems through the creation of best practices, measurement services, and research evaluation.

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NIST has long been a leader in communications research technology and has the equipment, and it has the expertise to characterize the mine environment and determine what techniques are best suited for these very difficult situations and conditions.

This bill is the product of bipartisan work in the Science Committee, and it creates a basic framework to ensure that the government's research agency works cooperatively, effectively and quickly to improve mine and miner safety.

The world-renowned capabilities of NIST laboratories and the years of study and experience at NIOSH and MSHA can significantly improve implementation of emergency communications and tracking systems in our mines. Improvement in these systems will substantially increase rescuers' ability to find and free miners in the event of a mine catastrophe, as we just outlined, that occurred recently in West Virginia and the great State of

H.R. 3877 would significantly contribute to the health and the safety of miners by uniting the communications and standards experience of NIST with the ongoing research and the mine environment experience at NIOSH and MSHA.

I want to applaud my colleague, Mr. MATHESON, for addressing this issue that he knows so well that is of such

utmost importance to his constituents in Utah, as well as mining communities across this country.

I urge all of my colleagues to support this bipartisan legislation. It will make significant advancements in miner safety.

Madam Speaker, I yield back the balance of my time.

Mr. MATHESON. I thank my colleague. I also want to thank him for making one additional really good point in his remarks, and that is that this legislation is complementary with what we are trying to do at NIOSH and MSHA.

Madam Speaker, Congress these days doesn't have the best reputation of working together on certain things, but this is an example where this committee worked really well in terms of coming up with legislation, where bills were originally introduced, there were some other questions during the committee process. Folks on the minority side of the aisle offered suggestions for a manager's amendment. We approved this bill. It has good bipartisan support. It's the right thing to do.

I again want to thank Dr. GINGREY and everyone on the Science Committee staff for their help in making this legislation work.

I will just close by saying that I visited the Crandall Canyon mine families right after the disaster. They were going through so many emotions that it's difficult for us to even imagine, but to not know where their loved ones were was probably the greatest frustration of all. If this legislation can provide a path to help provide answers to those questions in the future, then, clearly, it's the right thing to do.

I ask for a favorable vote from everybody on this legislation.

Madam Speaker, I yield back the balance of my time.

The SPEAKER pro tempore (Ms. Loretta Sanchez of California). The question is on the motion offered by the gentleman from Utah (Mr. Matheson) that the House suspend the rules and pass the bill, H.R. 3877, as amended

The question was taken; and (twothirds being in the affirmative) the rules were suspended and the bill, as amended, was passed.

The title was amended so as to read: "A Bill to require the Director of the National Institute of Standards and Technology to establish an initiative to promote the research, development, and demonstration of miner tracking and communications systems and to promote the establishment of standards and other measurement services regarding underground communications to protect miners in the United States."

A motion to reconsider was laid on the table.

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The SPEAKER pro tempore. Pursuant to clause 12(a) of rule I, the Chair